

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. **(Currently amended)** A method for treating presbyopia in a patient, the method comprising:

ablating a central zone of a corneal surface of a first eye of the patient to improve the patient's ability to view near objects through the central zone of the first eye by providing the central zone of the corneal surface of the first eye with a near optical power suitable for viewing the near objects, the central zone of the corneal surface of the first eye extending across a pupil center of the first eye and surrounded by a peripheral zone of the first eye, wherein the ablating of the first eye is performed so that the peripheral zone of the corneal surface of the first eye has a far optical power, the far optical power of the peripheral zone of the corneal surface of the first eye being less than the near power of the corneal surface of the first eye such that the peripheral zone is suitable for viewing far objects; and

ablating a peripheral zone of a corneal surface of a second eye of the patient to improve the patient's ability to view the near objects through the peripheral zone of the second eye by providing the peripheral zone of the corneal surface of the second eye with a near optical power suitable for viewing the near objects, the peripheral zone of the corneal surface of the second eye surrounding a central zone of the corneal surface of the second eye, the central zone of the corneal surface of the second eye extending across a pupil center of the second eye, wherein the ablating of the second eye is performed so that the central zone of the corneal surface of the second eye has a far optical power, the far optical power of the central zone of the corneal surface of the second eye being less than the near power of the peripheral surface of the second eye such that the central zone of the corneal surface of the second eye is suitable for viewing the far objects.

2. **(Original)** A method as in claim 1, wherein the central zone produced during the first ablating step comprises a substantially spherical surface.

3. **(Original)** A method as in claim 1, wherein the central zone produced during the first ablating step comprises a multifocal aspheric surface.

4. **(Original)** A method as in claim 1, wherein ablating the central zone of the corneal surface of the first eye comprises leaving a small central portion of the corneal surface untreated.

5. **(Currently amended)** A method as in claim 1, ~~wherein the ablated~~ further comprising scaling a diameter of the central zone has a diameter scaled to a diameter of a pupil of the first eye.

6. **(Original)** A method as in claim 1, wherein the ablated central zone has an optical power of between about 0.5 and 4.0 Diopters.

7. **(Original)** A method as in claim 6, wherein the ablated central zone has an optical power of between about 1.0 and 3.0 Diopters.

8. **(Original)** A method as in claim 6, wherein the ablated central zone has an optical power of about 1.75 Diopters.

9. **(Currently amended)** A method as in claim 1, further comprising ablating the ~~the~~ peripheral zone of the corneal surface of the first eye to improve the patient's ability to view the far objects through the peripheral zone of the first eye, and ablating the central zone of the corneal surface of the second eye to improve the patient's ability to view the far objects.

10. **(Currently amended)** A method as in claim 9, wherein the peripheral zone of the first eye extends radially outward from an outer boundary of the ablated central zone of the first eye to a diameter approximately matching an outer scotopic boundary of a pupil of

the first eye, and wherein the peripheral zone of the second eye extends radially outward from an outer boundary of the ablated central zone of the second eye to a diameter approximately matching an outer scotopic boundary of a pupil of the second eye.

11. **(Original)** A method as in claim 9, further comprising ablating a transition zone of the corneal surface of the first eye, the transition zone extending from an outer boundary of the ablated peripheral zone of the first eye.

12. **(Original)** A method as in claim 1, wherein ablating the peripheral zone of the corneal surface of the second eye comprises leaving a central zone of the corneal surface of the second eye untreated to provide for vision of distant objects through the central zone.

13. **(Original)** A method as in claim 12, wherein the central zone of the second eye has a diameter scaled to a diameter of a pupil of the second eye.

14. **(Original)** A method as in claim 1, further comprising ablating a central zone of the corneal surface of the second eye to improve the patient's ability to view distant objects through the central zone.

15. **(Currently amended)** A method for performing laser eye surgery on a patient to treat presbyopia, the method comprising:

determining a first ablative shape for a corneal surface, the first ablative shape being aspherical and providing an optical power that varies so as to enhance vision of near objects through a central zone of an eye, and so as to be suitable for vision of far objects through a peripheral zone of the eye;

ablating a corneal surface of a first eye of the patient according to the first ablative shape so that the central zone of the first ablative shape extends across a pupil center of the first eye and so that the peripheral zone of the first ablative shape extends radially outward to a diameter of a pupil of the first eye;

determining a second ablative shape for a corneal surface, the second ablative shape being aspherical and providing an optical power that varies so as to enhance vision of the

near objects through a peripheral zone of an eye, and so as to be suitable for vision of the far objects through a central zone of the eye; and

ablating a corneal surface of a second eye of the patient according to the second ablative shape so that the central zone of the second ablative shape extends across a pupil center of the second eye and so that the peripheral zone of the second ablative shape extends radially outward to a diameter of a pupil of the second eye, wherein the first and second ablative shapes mitigate the presbyopia.

16. **(Original)** A method as in claim 15, wherein the first ablative shape comprises a central zone having a substantially spherical surface.

17. **(Original)** A method as in claim 15, wherein the first ablative shape comprises a central zone having a multifocal aspheric surface.

18. **(Original)** A method as in claim 15, wherein the first ablative shape comprises a small central portion of the central zone that remains untreated.

19. **(Currently amended)** A method as in claim 15, ~~wherein further comprising sealing~~ the central zone of the eye according to the first ablation shape ~~has a diameter sealed to a diameter of a pupil of the first eye.~~

20. **(Original)** A method as in claim 15, wherein the central zone of the eye according to the first ablative shape has an optical power of between about 0.5 and 4.0 Diopters.

21. **(Original)** A method as in claim 20, wherein the central zone of the eye according to the first ablative shape has an optical power of between about 1.0 and 3.0 Diopters.

22. **(Original)** A method as in claim 20, wherein the central zone of the eye according to the first ablative shape has an optical power of about 1.75 Diopters.

23. **(Original)** A method as in claim 15, wherein the first ablative shape includes a peripheral zone, wherein the peripheral zone is shaped to provide for vision of distant objects.

24. **(Currently amended)** A method as in claim 15[[23]], wherein the first ablative shape further includes a transition zone, the transition zone extending from an outer boundary of the peripheral zone.

25. **(Original)** A method as in claim 15, wherein the second ablative shape includes an untreated central zone to provide for vision of distant objects.

26. **(Original)** A method as in claim 15, wherein the second ablative shape includes a central zone shaped to improve the patient's ability to view distant objects.

27. **(Currently amended)** A laser eye surgery system for treating presbyopia in a patient, the system comprising:

- a laser device for emitting a beam of ablative energy;
- delivery system optics coupled to the laser device; and

- a processor coupled with the laser device and the delivery system optics to direct the beam of ablative energy to ablate a first ablative shape on a corneal surface of a first eye of the patient and a second ablative shape on a corneal surface of a second eye of the patient, wherein the processor includes a tangible medium having a treatment table associated with each ablative shape embodied thereon, and wherein the first ablative shape has optical power that varies across the corneal surface of the first eye so that the first ablative shape enhances near vision through a central zone of the first eye while enhancing far vision through a peripheral zone of the first eye surrounding the central zone of the first eye, and the second ablative shape has optical power that varies across the corneal surface of the second eye so that the second ablative shape enhances near vision through a peripheral zone of the second eye while enhancing far vision through a central zone of the second eye surrounded by the peripheral zone of the second eye, the central cone of each eye encompassing the pupil center of the eye.

28. **(Previously presented)** A system as in claim 27, wherein the treatment table includes reference coordinates for directing the laser device to ablate the first and second ablative shapes.

29. **(Previously presented)** A system as in claim 28, wherein the treatment table is configured so that the central zone of the first ablative shape comprises a substantially spherical surface.

30. **(Previously presented)** A system as in claim 28, wherein the treatment table is configured so that the central zone of the first ablative shape comprises a multifocal aspheric surface.

31. **(Previously presented)** A system as in claim 28, wherein the treatment table is configured so that the first ablative shape includes a small untreated central portion within the central zone.

32. **(Previously presented)** A system as in claim 28, wherein the treatment table is configured so that the central zone of the first ablative shape has a diameter scaled to a diameter of a pupil of the first eye.

33. **(Previously presented)** A system as in claim 28, wherein the treatment table is configured so that the central zone of the first ablative shape has an optical power of between about 0.5 and 4.0 Diopters.

34. **(Original)** A system as in claim 33, wherein the central zone has an optical power of between about 1.0 and 3.0 Diopters.

35. **(Original)** A system as in claim 34, wherein the central zone has an optical power of about 1.75 Diopters.

36. **(Previously presented)** A system as in claim 28, wherein the treatment table is configured so that the first ablative shape further comprises a peripheral zone for viewing distant objects.

37. **(Previously presented)** A system as in claim 36, wherein the treatment table is configured so that the first ablative shape further includes a transition zone, the transition zone extending from an outer boundary of the peripheral zone.

38. **(Previously presented)** A system as in claim 28, wherein the treatment table is configured so that the second ablative shape includes an untreated central zone to provide for vision of distant objects.

39. **(Previously presented)** A system as in claim 28, wherein the treatment table is configured so that the second ablative shape includes a central zone shaped to improve the patient's ability to view distant objects.

40. **(Previously presented)** A system as in claim 27, wherein the processor includes a module having software comprising tangible media embodying machine-readable instructions for directing the laser device to ablate the first and second ablative shapes.

41. **(Currently amended)** A method for treating presbyopia in a patient, the method comprising:

ablating a central zone of a corneal surface of a first eye of the patient to improve the patient's ability to view near objects through the central zone of the first eye, the central zone of the first eye encompassing a center of a pupil of the first eye;

ablating a peripheral zone of the corneal surface of the first eye of the patient to improve the patient's ability to view far objects through the peripheral zone of the first eye;

ablating a peripheral zone of a corneal surface of a second eye of the patient to improve the patient's ability to view near objects through the peripheral zone of the second eye;
and

ablating a central zone of the corneal surface of the second eye of the patient to improve the patient's ability to view far objects through the central zone of the second eye, the central zone of the second eye encompassing a center of a pupil of the first eye.

42. **(Currently amended)** A method for treating presbyopia in a patient, the method comprising:

determining a ~~complementary~~ treatment plan for a first and a second eye of the patient, wherein the first and second eyes each have a central zone of a corneal surface and a peripheral zone of a corneal surface, each central zone encompassing a center of a pupil of the associated eye;

ablating the central zone of the corneal surface of the first eye of the patient in accordance with the treatment plan so as to improve the patient's ability to view near objects through the central zone of the first eye; and

ablating the peripheral zone of the corneal surface of the second eye of the patient in accordance with the treatment plan so as to improve the patient's ability to view near objects through the peripheral zone of the second eye.